

Question L-171: Question L-136: Are the containers in the hot cell in the ranges of 1 R/hour at container surface the same containers referenced in Table 7? Answer: Reference Section L, Attachment L-4, Representative Sample Task, Section 4.3, 5th paragraph. Section 4.3 "Fuel Specimen and Material Research Hotcell Facility Background" states "Radiation levels associated with some containers in the Hotcell are in the range of 1 R/hour at container surface. An inventory of remaining known wastes in the FSMHF is provided in Table 7....". The 1 R/hour dose rate is associated with the containers in the Hotcell and is part of the waste listed in Table 7. In addition, the Hotcell contains residual contamination exceeding the DOE-STD-1027 radionuclide threshold for a Hazard Category 2 Nuclear Facility. Does this mean that it is a Cat 1 Facility?

Answer: Reference Section L, Attachment L-4, Representative Sample Task, Section 4.3, 5th paragraph. Section 4.3 "Fuel Specimen and Material Research Hotcell Facility Background". The Hotcell is a Hazard Category 2 facility based on the combined residual contamination and identified inventory. The amount of residual contamination exceeds the DOE-STD-1027 Table A.1 Threshold for Radionuclides value for Category 2 Nuclear Facilities but does not meet the criteria for a Category 1 Nuclear Facility; therefore, the Facility has been categorized as a Category 2.

Question L-172: Question L-139: What are the limits in the approved BIO that apply to fissile grams, curies, etc. Answer: Reference Section L, Attachment L-4, Representative Sample Task, Figures 9 and 11 and Table 7. The limits in the current approved BIO are $3.0\text{E}+4$ plutonium equivalent grams (PEg). This includes a limit of 400 PEg for the first floor of the FSMHF area outside the Hotcell (Area 4 on Figure 9), a limit of 300 PEg for the second floor area of the FSMF (Figure 11), and a limit of 2300 PEg for the Hotcell. Offerors should assume that the current Basis for Interim Operation (BIO) adequately encompasses the waste materials and inventory provided in Table 7 and the suspected number of samples in the within floor storage tubes in Area 2. In addition, the BIO adequately analyzes and describes the storage, movement within the FSMHF, repackaging, and shipment of these items. All known fissile material is provided in Table 7 with the exception of the suspected number of samples in the within-floor storage tubes in Area 2. Question L-133: The hot cell operations created a substantial inventory of high curie fission products which are distributed throughout the hot cell and support facilities. Please provide offerors an inventory of the wastes from the MRB to be used for proposal purposes. The waste categories are: LLRW, MLLW, CH TRU RH TRU and 10-100 nCi/gm. Answer: Reference Section L, Attachment L-4 Representative Sample Task, Section 4.3. Remaining Waste and Materials Inventory are provided in Table 7 with the exception of the suspected samples in the within-floor storage tubes in Area 2. There is no TRU waste besides that which is shown in Table 7. All other waste inventories such as demolition debris or decontamination waste will be determined by information provided in the sample task and will also be determined, in part, by the offeror's approach. Clarification: Could there be fissile, non-TRU in the storage tubes?

Answer: Section L, Attachment L-4, Representative Sample Task Section 4.3 states: "It is not known if any irradiated samples still remain in the storage tubes, or if any of the storage tubes are contaminated." Offerors should assume that these samples have the potential to be non-TRU fissile material. Offerors should also assume that the BIO adequately describes the storage of containerized samples in the tubes and that any quantity remaining in the tubes is not a criticality issue.

Question L-173: Clarification Question Regarding Ref: L-13 (revised) and L-135. Reference revised response to Question L-13 and response to Question L-135: The assumptions of 4% enrichment and 400 g U-235 per can seem inconsistent, as this would imply 10 kg of uranium per can. Please clarify.

Answer: Reference answers to Question Ref: L-13 (revised) and L-135. As stated in the answer to Question L-13 (revised), the total amount of U235 is 400g. This 400g amount is divided, unequally among the 25 cans. There is not 400g of U235 in each can.

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Questions & Answers L-171 through L-174
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Question L-174: The response to question L-63 and L-74 are in direct conflict. L63 response- “ Offerors should assume the basements of all other wings are under the entire footprint of each building ” L74 response- “However offerors should assume that the basement footprint is comparable to the areas shown on Figures 6,7 and 8 for the ground and second floors of the MRB building, but with significant areas of fill as indicated in the Reference Section L Attachment L-4.....” Question: Are there significant quantities of fill in the basement similar to “F-Wing” included in the remaining basement of the MRB?

Answer: Section L, Attachment L-4, Representative Sample Task and Question L-63 and L-64. These responses are not conflicting. The basement footprint is comparable to the area shown for the first and second floors in Figures 6, 7 and 8. Offerors should assume that there are comparable quantities of fill in the basement, similar to F-Wing, included in the remaining basement of the MRB.